

Missouri Department of Natural Resources

## Total Maximum Daily Load Information Sheet

### Straight Fork Branch

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#### Waterbody Segment at a Glance:

**County:** Morgan  
**Nearby Cities:** Versailles  
**Length of impairment:** 1.1 miles  
**Pollutant:** Volatile Suspended Solids (VSS)  
**Source:** Versailles Wastewater Treatment Plant (WWTP)



State map showing location of watershed

**Propose to change the length of impairment from 2.0 to 1.1 miles and pollutant from NFR to VSS**

**TMDL Priority Ranking:** Low

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#### Description of the Problem

##### Beneficial uses of Straight Fork Branch

- Livestock and Wildlife Watering
- Protection of Warm Water Aquatic Life and Human Health associated with Fish Consumption

##### Use that is impaired

- Protection of Warm Water Aquatic Life

##### Standards that apply

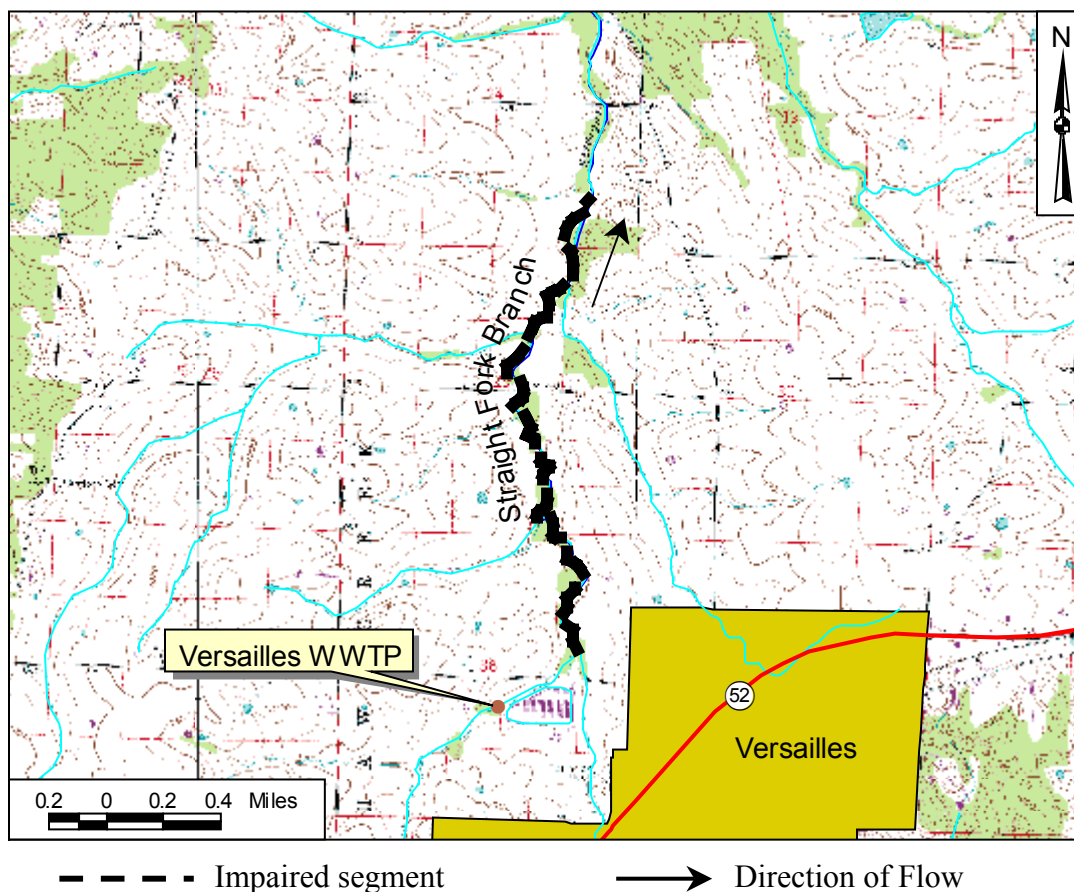
- The impairment is based on exceedence of the general criteria contained in Missouri's Water Quality Standards, 10 CSR 20-7.031 (3)(A) and (C). These criteria state:
  - Waters shall be free from substances in sufficient amounts to cause the formation of putrescent, unsightly or harmful bottom deposits or prevent full maintenance of beneficial uses.
  - Waters shall be free from substances in sufficient amounts to cause unsightly color or turbidity, offensive odor or prevent full maintenance of beneficial uses.

Any waterbody that was listed for Non-filterable Residue (NFR) in 1998 is now being listed for Volatile Suspended Solids (VSS). This change was made to better distinguish between solids coming from wastewater treatment plants (VSS) and solids coming from soil erosion or erosion of mine waste materials or stockpiles (Non-Volatile Suspended Solids or NVSS).

Straight Fork Branch shows excessive suspended algae due to discharges from the stormwater basin of the Versailles wastewater treatment plant (WWTP). Volatile suspended solids refer to particles that are suspended in water, like algae, or those that settle out, like the sewage sludge. Suspended algae

block sunlight and reduce dissolved oxygen in the water. Many aquatic organisms require high levels of oxygen to survive. Excess algae also cause unsightly color in the water and increased turbidity. Like all wastewater discharges in Missouri, the Versailles WWTP is required to meet specific limits contained in a discharge permit issued by the Missouri Department of Natural Resources. By making changes to the conditions of the discharge permit, the quality of the plant discharge will be improved and result in improvements in Straight Fork Branch.

### **Straight Fork Branch with Versailles WWTP**



**For more information call or write:**

Missouri Department of Natural Resources

Water Pollution Control Program

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